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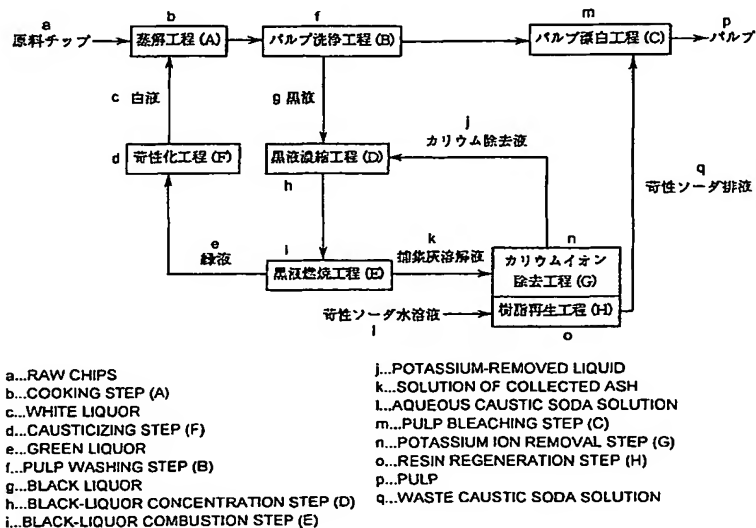
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| (51) 国際特許分類: | D21C 11/04 | 0005 東京都 豊島区 南大塚三丁目 4 3 番 1 号 Tokyo (JP). 北越製紙株式会社 (HOKUETSU PAPER MILLS, LTD.) [JP/JP]; 〒940-0027 新潟県 長岡市 西蔵王三丁目 5 番 1 号 Niigata (JP). |
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| (25) 国際出願の言語: | 日本語 | (75) 発明者/出願人 (米国についてのみ): 古荘 三郎 (FURUSHO, Saburo) [JP/JP]; 〒170-0005 東京都 豊島区 南大塚三丁目 4 3 番 1 号 日本錬水株式会社内 Tokyo (JP). 河野 典生 (KAWANO, Norio) [JP/JP]; 〒227-0033 神奈川県 横浜市 青葉区 鴨志田町 1 0 0 0 番地 日本錬水株式会社 研究所内 Kanagawa (JP). 若本 茂 (WAKAMOTO, Shigeru) [JP/JP]; 〒950-0881 新潟県 新潟市 榎町 5 7 北越製紙株式会社 新潟工場内 Niigata (JP). |
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| (71) 出願人 (米国を除く全ての指定国について): 日本錬水株式会社 (NIPPON RENSUI CO.) [JP/JP]; 〒170- | | |

〔続葉有〕

(54) Title: PROCESS FOR PRODUCING KRAFT PULP

(54) 発明の名称: クラフトパルプの製造方法



(57) **Abstract:** A process for producing a kraft pulp, which includes a potassium ion removal step (G) in which an aqueous solution of collected ashes recovered with a dust collector from a combustion gas discharged from a black-liquor combustion step (E) is passed through a bed of a sodium-form cation-exchange resin packing to adsorb and remove potassium ions and a regeneration step (H) in which the cation-exchange resin used in the potassium ion removal step (G) is regenerated with an aqueous caustic soda solution, wherein a fraction rich in sodium sulfate and sodium carbonate and recovered in the potassium ion removal step (G) is circulated to the black-liquor concentration step (D), and a waste caustic soda solution recovered in the regeneration step (H) is reused in the bleaching step (C).

(57) 要約: ラフトパルプの製造方法において、黒液燃焼工程(E)の燃焼排ガスから集塵機にて回収された捕集灰の水溶解液をナトリウム形カチオン交換樹脂の充填床に通流してカリウムイオンを吸着除去するカリウムイオン除去工程(G)と、当該カリウムイオン除去工程(G)で使用されたカチオン交換樹脂の苛性ソーダ水溶液による再生工程(H)とを設け、そして、カリウムイオン除去工程(G)

〔統葉有〕

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(81) 指定国 (国内): AU, BR, CA, CN, ID, IN, KR, NO, NZ, RU, US, ZA.

(84) 指定国 (広域): ヨーロッパ特許 (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR).

添付公開書類:

— 国際調査報告書

2文字コード及び他の略語については、定期発行される各PCTガゼットの巻頭に掲載されている「コードと略語のガイダンスノート」を参照。

From the INTERNATIONAL BUREAU

PCT

NOTICE INFORMING THE APPLICANT OF THE
COMMUNICATION OF THE INTERNATIONAL
APPLICATION TO THE DESIGNATED OFFICES

(PCT Rule 47.1(c), first sentence)

To:

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Date of mailing (day/month/year) 21 May 2004 (21.05.2004)		
Applicant's or agent's file reference W005PCT		
IMPORTANT NOTICE		
International application No. PCT/JP2003/011606	International filing date (day/month/year) 11 September 2003 (11.09.2003)	Priority date (day/month/year) 05 November 2002 (05.11.2002)
Applicant NIPPON RENSUI CO. et al		

1. Notice is hereby given that the International Bureau has communicated, as provided in Article 20, the international application to the following designated Offices on the date indicated above as the date of mailing of this notice:

AU, CN, EP, KR, RU, US

In accordance with Rule 47.1(c), third sentence, those Offices will accept the present notice as conclusive evidence that the communication of the international application has duly taken place on the date of mailing indicated above and no copy of the international application is required to be furnished by the applicant to the designated Office(s).

2. The following designated Offices have waived the requirement for such a communication at this time:

BR, CA, ID, IN, NO, NZ, ZA

The communication will be made to those Offices only upon their request. Furthermore, those Offices do not require the applicant to furnish a copy of the international application (Rule 49.1(a-bis)).

3. Enclosed with this notice is a copy of the international application as published by the International Bureau on 21 May 2004 (21.05.2004) under No. WO 2004/042140

4. **TIME LIMITS** for filing a demand for international preliminary examination and for entry into the national phase

The applicable time limit for entering the national phase will, subject to what is said in the following paragraph, be 30 MONTHS from the priority date, not only in respect of any elected Office if a demand for international preliminary examination is filed before the expiration of 19 months from the priority date, but also in respect of any designated Office, in the absence of filing of such demand, where Article 22(1) as modified with effect from 1 April 2002 applies in respect of that designated Office. For further details, see *PCT Gazette* No. 44/2001 of 1 November 2001, pages 19926, 19932 and 19934, as well as the *PCT Newsletter*, October and November 2001 and February 2002 issues.

In practice, time limits other than the 30-month time limit will continue to apply, for various periods of time, in respect of certain designated or elected Offices. For regular updates on the applicable time limits (20, 21, 30 or 31 months, or other time limit), Office by Office, refer to the *PCT Gazette*, the *PCT Newsletter* and the *PCT Applicant's Guide*, Volume II, National Chapters, all available from WIPO's Internet site, at <http://www.wipo.int/pc/en/index.html>.

For filing a demand for international preliminary examination, see the *PCT Applicant's Guide*, Volume IA, Chapter IX. Only an applicant who is a national or resident of a PCT Contracting State which is bound by Chapter II has the right to file a demand for international preliminary examination (at present, all PCT Contracting States are bound by Chapter II).

It is the applicant's sole responsibility to monitor all these time limits.

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Authorized officer

Yoshiko Kuwahara

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